

B-128  
HERITAGE ENVIRONMENTAL SERVICES, INC.

P.O. Box 337  
Lemont, IL 60439-0337  
Phone: 708/739-1151  
FAX: 708/739-9491



November 20, 1995

Mark A. Schollenberger  
Environmental Protection Engineer  
Illinois Environmental Protection Agency  
Permit Section  
Division of Land Pollution Control  
2200 Churchill Road  
Springfield, Illinois 62794

US EPA RECORDS CENTER REGION 5



1010357

Dear Mr. Schollenberger:

As we discussed by telephone on November 14, 1995, enclosed are two additional copies of the tank integrity assessment report. This letter also serves to confirm your statement that the neither the tank integrity assessment report nor the containment coating assessment is required to be submitted. Accordingly, in the future these reports will only be maintained in the facility operating record.

Should you have any questions, require additional information, or wish to discuss this further, please contact the undersigned at (708)739-1151.

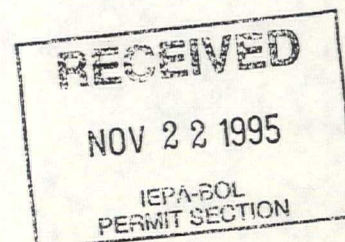
Sincerely,

HERITAGE ENVIRONMENTAL SERVICES, INC.

*Ron Wilkins*

Ron Wilkins, CHMM  
Compliance Manager

cc: Angie Martin - Heritage Indianapolis  
Robert Garcia - Heritage Lemont



4101RW95.L1



Recycled Paper

RCRA  
code 1

5E0401-A0402

NFA, YGW  
4/27/89  
12/1/89

RCRA

RECEIVED

APR 03 1989

Pre-Remedial  
Unit

**CERCLA**  
**Environmental Priorities Initiative**  
**Preliminary Assessment**  
**Report**



Illinois Environmental  
Protection Agency  
P.O. Box 19276,  
Springfield, IL 62794-9276

Haz. Ranking  
System Score  
Report removed

Confidential Material May be Enclosed



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## EXECUTIVE SUMMARY

### Location

Petrochem Services, Incorporated can be found on Canal Bank Road N.E., Lemont, Cook County, Illinois which is between the Des Plaines River and the Chicago Sanitary and Ship Canal. Petrochem maintains a 35 year lease with the Metropolitan Sanitary District of Greater Chicago. The 17 acre facility is located in the N1/2 of Section 21, Township 37 N., Range 11 E. of the 3rd P.M.

### Current Operations

Petrochem Services, Incorporated is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. This facility receives hazardous and non-hazardous wastes from off site and blends and treats these wastes to produce hazardous waste fuel, off-specification used oil and on-specification used oil (little to no on-spec used oil is generated). Sources of waste generated off site include cleaning tanker trucks and cleaning off site stationary tanks. This facility also operates an on site barge cleaning operation. They receive hazardous and non-hazardous wastes from the Illinois Environmental Protection Agency (IEPA Emergency Response Unit), the Illinois State Police Department of Criminal Investigations, Tox-Away (a government-sponsored Indianapolis, Indiana project to handle the shipment and disposal of hazardous household wastes) and generators, for temporary storage, which eventually go off site for incineration.

### Permitting Status/History

Petrochem qualified for Interim Status by reporting that the construction of the facility began in May of 1980. IEPA Air Permit # 82110046 was issued July 6, 1984 while Operating Permit # 1983-5-OP was issued on August 24, 1984. In October of 1984, the first load was processed by the new facility. On April 2, 1985, ILWD purchased 50% of Petrochem stock which changed representation on the board of directors. As a result, on July 22, 1985, Petrochem started accepting solvents on a commercial basis and not just for emergencies as stated in the Operating Permit. Supplemental Permit # 1986-116-SP was issued July 17, 1986 only to be revised on August 28, 1987 and again of March 10, 1988. Currently, Heritage Environmental, Incorporated has sole ownership of



the facility and in April of 1989, Petrochem's name will be changed to reflect this.

#### SWMU Identification

Petrochem's facility consists of five Solid Waste Management Units (SWMU's). One SWMU was destroyed by fire and another is to be built sometime in the near future.

#### Tank Storage and Treatment Area

A major portion of wastes is processed in a 173.33 feet by 71.33 feet area that is capable of acid/chemical treatment, heat treatment, filtration, blending, agitation, flocculation, air flotation, dehydration, centrifuge, water treatment, carbon treatment, solidification, distillation, neutralization, fixation, emulsification, separation, and burning hazardous waste fuels and used oil fuel in the industrial boiler. The area is concrete diked to contain 110% of the total capacity of the 23 tanks involved in this SWMU.

Thirteen of the 23 tanks are used to treat oil/hydrocarbon mixes. These vessels recycle the oil-water mixture or the hydrocarbon-water mixture first by separation of the aqueous phases. This is accomplished by any of a number of the process listed above which will finally render the used oil into industrial fuel and the hazardous hydrocarbons into hazardous waste fuels. The aqueous phases are separated and disposed of as non hazardous or listed hazardous waste. The solids are dewatered and shipped to a landfill as hazardous or non hazardous.

Six tanks are designated for independent storage and or treatment. The vessels are used to store waste and perform basic treatment, such as, blending, decanting of aqueous phase, and filtration. Two of these tanks have side entry mixers to allow blending of various hazardous waste into hazardous waste fuel for licensed hazardous waste fuel burners. The other four tanks are used to store waste or recycled products. The waste may be hazardous or non hazardous and is either hazardous waste fuel blend stock or is accumulated for truckload shipments to recyclers or disposal sites.

The four other tanks inside the diked area include a lime slurry storage tank, two boiler fuel tanks and a recirculation tank. Two process water storage tanks are located just outside the diked area. The volumes of all of the tanks can be seen in the Visual Site Inspection Report.

The hazardous (restricted) wastes are generated at the rate of 45,000 gallons per month. This is shipped off site approximately 3 times per week to Continental Cement



(Hanibal, Missouri) or Systech (Greencastle, Indiana) for use as fuel in cement kilns.

#### Drum/Container Storage Area

Another SWMU is the drum/container storage area adjacent to the tank dike. The drums are stored for off site treatment/disposal or on site treatment by the preceding SWMU. The drum/container storage area is also diked so that 110% of the capacity of 600 drums would be contained. The unloading dock is designed so that any spills could be contained and collected by a sump built into the asphalt drive at the base of the dock.

#### Containerized Storage in Van Trailers

The area with containerized storage in van trailers is also considered a SWMU and is approximately 50 feet by 70 feet. This area can accommodate 10 trailers containing about 80 drums per trailer and is situated on an asphalt pad with a 2 to 3 inch berm.

#### Shredder Unit

A shredder unit operation that started in March of 1988 was destroyed by fire on September 1, 1988. The cause of the fire is unknown and Petrochem's insurance company is currently investigating. The SWMU consisted of a 160 drum storage with five 550 gallon process liquid waste storage tanks to facilitate the Shred-pax AZ-15 unit. Aerosol and non aerosol consumer products were processed by this unit.

#### Roll-Off Boxes

Two roll-off boxes are used to discard debris from the other SWMU's. The 15 and 20 cubic yard roll-off boxes are used to store recyclible metals or other trash.

#### Drum Crusher Unit

The drum crusher unit is used to reduce the volume of old drums that would go to a recycler. This unit is located near the roll-off boxes.

#### Hazardous Materials Present

Petrochem is permitted to accept a wide variety of wastes. An analysis of each waste stream accepted from each generator is to be maintained on file. The types of waste for recovery include: non-halogenated aliphatics; non-halogenated aromatics; alcohols; ketones; halogenated aliphatics; esters; corrosive waste; non-hazardous used, waste, off-spec and surplus oil; hazardous used, waste, off-spec and surplus oils; and listed hazardous petroleum refinery wastes. The



types of waste for blending into supplemental fuels include: non-hazardous used, waste, off-spec and surplus oils; hazardous used, waste, off-spec and surplus oils; non-halogenated solvents and liquids; and washes and sludges from the formulation of ink. Wastes for bulking and or blending consist of the following: non-halogenated solvents and liquids; and halogenated solvents and liquids. The wastes treated include: corrosive waste for neutralization and off-specification or scrap commercial products which were shredded. Wastes for crushing include, "RCRA Empty" contains. A complete list of wastes can be found in the attached supplemental permit.

#### Compliance History

The facility has had no major compliance problems. In the last inspection on September 30, 1988, the only deficiency noted was that containers of restricted hazardous waste were not marked to identify the date they entered storage.

#### Visual Site Inspection

At 1:00 pm on January 9, 1989, a visual site inspection was conducted by Tim Murphy and Rob Watson of IEPA. Petrochem was represented by Michael J. Crafton, plant manager and Paul Zajec, plant foreman. The weather conditions were clear and breezy with a temperature of 24 degrees Fahrenheit.

We first walked through the vehicle maintenance shop and on to the laboratory. The shop, as well as the laboratory appeared to be clean and organized. No analysis were being conducted at the time of our visit. From the laboratory we exited the building and stood in the truck transfer area. Although this area is to be a containment area should a spill occur, we noticed the area was fairly level. We proceeded to walk around the tank process storage and treatment unit and discussed some of the processes. No cracks were noted in the 5 foot dike that surrounded the tanks. We continued on and inspected the drum/containerized storage area and the containerized storage in van trailer area. Southwest of the van trailer storage area, we saw where the shredder unit had been destroyed by fire. The debris from the fire had been cleaned up and removed or stored in the north corner of the property.

Drainage for the balance of the property is to the canal either by direct gradient or by a small ditch on the western portion of the property. The ditch could be blocked off in the event of a mishap. The capacity of the ditch is several thousand gallons.

Next, we looked at an area south of the main processing SWMU and northeast of the burned shredder unit where a new treatment system is to be built. Rob Watson who is reviewing



the permit for the fixation unit, wanted to look at the location. The inspection ended at 3:00 pm after a question and answer session in the offices.

#### Site Releases/Sampling

No samples have ever been taken of Petrochem's facility and a file review has come up with no complaints. There has been three reported minor releases, one release to the Canal and two air releases. On February 19, 1985, 150-200 gallons of 28% caustic was lost to the Sanitary and Ship Canal when a barge hose ruptured. A 95% clean-up was reported. In July of 1988, a reaction in a trailer sent approximately 5 pounds of lithium aluminum hydrate into the air. The other air release occurred in the September 1, 1988 shredder unit fire.

#### Targets

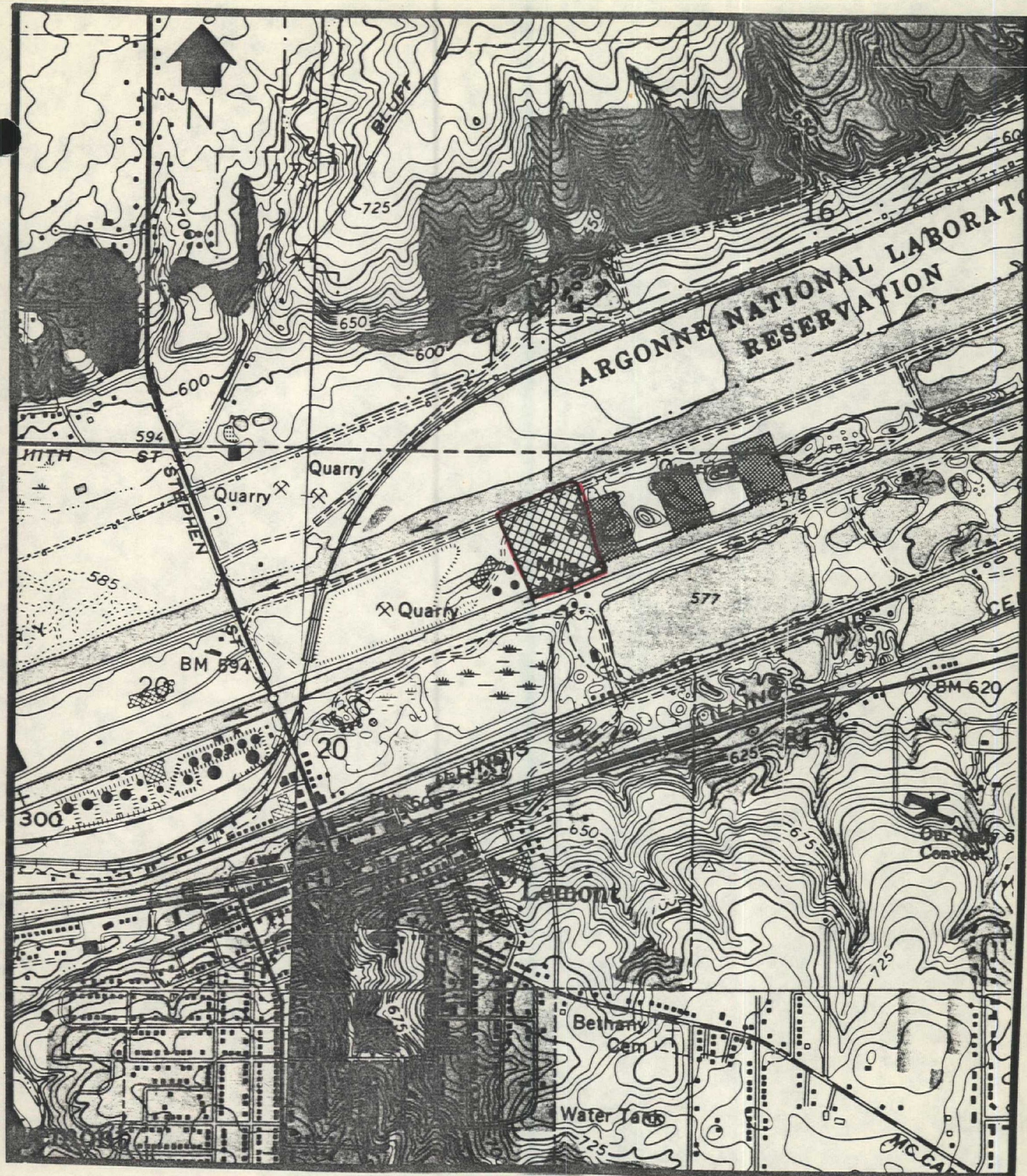
In a four mile radius of Petrochem, there are 19 public water wells. The nearest well is one mile south of the site in the village of Lemont. The well is one of three wells that supply the 5640 citizens of Lemont. The well is open from 128 feet to 241 feet in the fractured dolomite aquifer continuous with the aquifer underlying Petrochem. The other two wells are about a mile and a half away and are open in the deeper sandstone aquifer as are many of the other wells in the surrounding area.

Nearby surface waters in the area consist of the Sanitary and Ship Canal that bounds the southwest and southeast side of the property and the Des Plaines River. According to a recent Flood Insurance Rate Map of Cook County Illinois, Petrochem is located in an area of minimal flooding. A 100 year food plain exists on the other side of the Des Plaines River. No public surface water intakes are located downstream.

Air releases are documented and have been discussed in the preceding section. Other than the two reported incidences, no ongoing air pollution episodes were noticed. The area within a half mile of the site is almost entirely industrialized.

The direct contact route is held in check by and 8 foot fence around the site with the exception of the canal and barge slip areas were a 5 foot shear would be encountered.

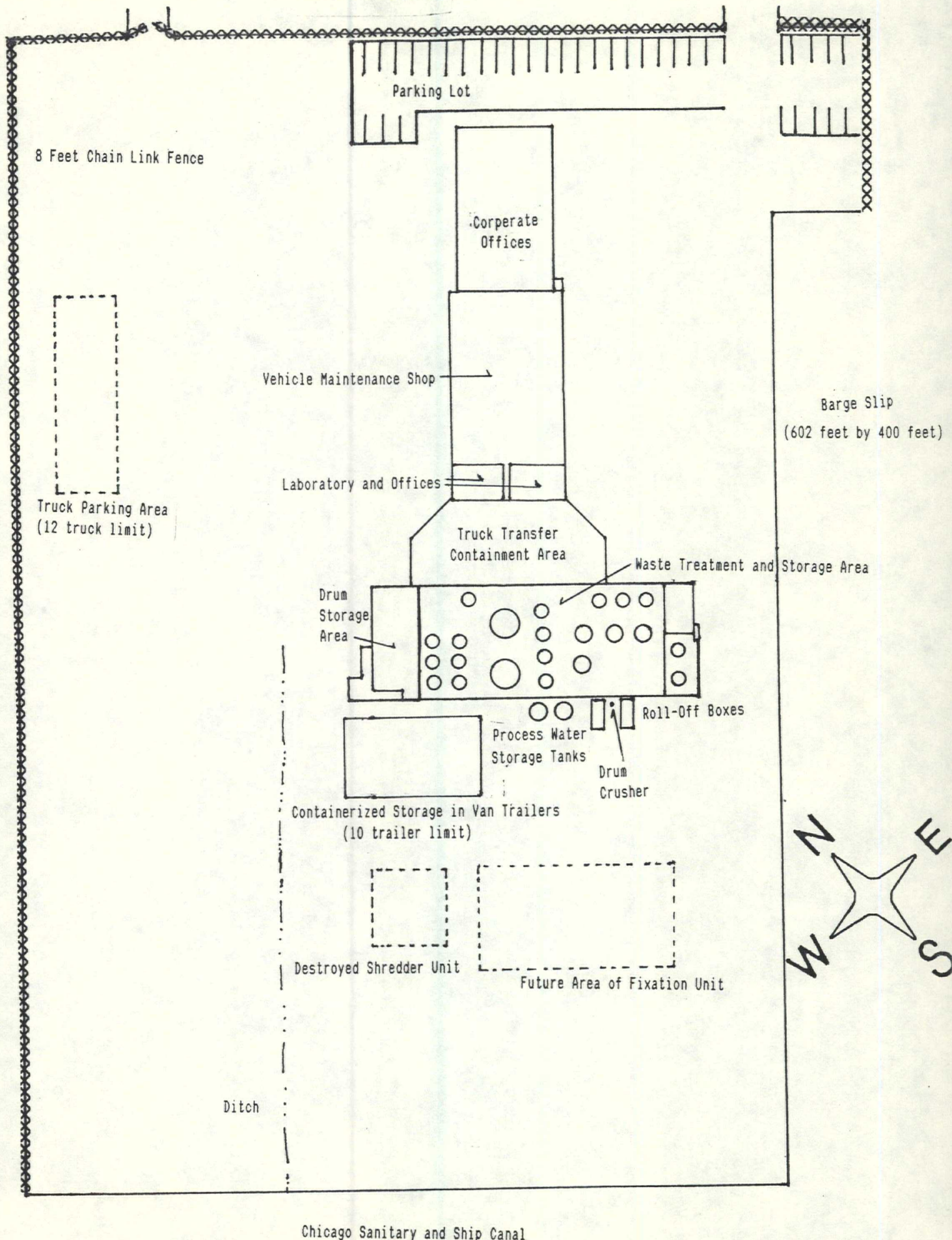




USGS Topographic Series: Romeoville, IL and Sag Bridge, IL  
(53A revised 1980, 54B photorevised 1978)

Scale: 1 inch equals 1/4 mile







VISUAL SITE INSPECTION REPORT



## FACILITY VISUAL SITE INSPECTION FORM

Facility Name: Petrochem Services, Inc. EPA I.D. Number: ILD 085349264  
 Location Address: Canal Bank Rd. N.E. ~~TDD Number:~~ \_\_\_\_\_  
Lemont, IL 60439 (Cook County) ~~WTS Number:~~ \_\_\_\_\_  
 Facility Contact/Title: Michael J. Crafton, Plant Manager  
 Phone Number: (312) 739-1150  
 Date of Inspection: January 9, 1989 Time of Inspection: 13 00  
 Weather: clear, breezy, 24° F

Person(s) Interviewed	Organization	Title
<u>Michael J. Crafton</u>	<u>Heritage Environmental Services, Inc.</u>	<u>Plant Manager</u>
<u>Paul Zajec</u>	<u>Petrochem Services, Inc.</u>	<u>Plant Foreman</u>

Inspector(s)	Organization	Title
<u>Timothy J. Murphy</u>	<u>IEPA Remedial Project Management Section</u>	<u>Environmental Specialist</u>
<u>Rob Watson</u>	<u>IEPA Permit Section</u>	<u>Environmental Engineer</u>

Facility Description: Petrochem Services, Inc. is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. The facility engages in various storage and treatment technologies of hazardous and non hazardous waste which result in the production of recycled materials, fuels, hazardous waste fuels, off spec oil and enhanced disposal streams. Petrochem also serves as a generator, transporter, marketer and burner of hazardous waste fuels. The facility consists of corporate offices, a 70' x 100' vehicle maintenance shop, a laboratory, a 130' truck transfer and containment area, a 173.33' x 71.33' 23 tank storage and treatment area, 2 28,481 gallon process water storage tanks, a 30.67' x 71.33' 600 drum storage area, 1



#### 4. Visual Site Inspection (VSI)

A. ~~Specific Objectives:~~ 15 cubic yard and 1 20 cubic yard storage roll-off boxes, a 10 van trailer storage area, a plate and frame filter press unit, 2 heat exchangers, a boiler, a drum crusher, and all corresponding sumps, pumps, piping controls, filters, and appurtenances. Petrochem also had a Shed-pax AZ-15 shredder with conveyors, fire suppression, exhaust and liquid collection system which had a 160 drum storage area and 5 550 gallon process liquid waste storage tanks. This system burned up Sept. 1, 1988.



# SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 1

Type: Tank Storage and Treatment Area

Unit Description: The 23 storage tanks or vessels used at the facility are constructed of materials compatible with materials held in storage. The vessels are located inside of a concrete dike designed to contain 110% of the total capacity of all vessels. Processes include acid/chemical treatment, heat exchanger, filtration, blending, agitation, flocculation, air floatation, dehydration, centrifuge, water treatment, carbon treatment, solidification, distillation, neutralization, fixation, emulsification, separation, and burn hazardous waste fuels and used oil fuel in the industrial boiler. A list of the tanks is on the following page.

Date of Start Up: 8-24-84

Date of Closure: active

Method of Closure: \_\_\_\_\_

Waste Description: A wide variety of wastes are processed at this SWMU, these included the following listed on the supplemental permit attached in the supporting documentation (002 page 47)



<u>Tank Designation</u>	<u>Volume Per Tank (Gals.)</u>	<u>Usage</u>
ST-1	7,686	Waste/Product Storage and Fuel Blending
ST-2	10,380	Waste/Product Storage and Fuel Blending
ST-3	11,177	Waste/Product Storage and Fuel Blending
ST-4	10,981	Waste/Product Storage and Fuel Blending
ST-5	7,686	Waste/Product Storage and Fuel Blending
ST-6	7,686	Waste/Product Storage and Fuel Blending
OS-1	62,375	Waste/Product Oil Storage
OS-2	62,375	Waste/Product Oil Storage and Fuel Blending
HT-1	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-2	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-3	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-4	19,828	Heat/Treatment and Waste/Product Oil Storage
CB-1	21,401	Oily Waste Treatment/Holding Tank
CB-2	21,401	Oily Waste Treatment/Holding Tank
CB-3	21,401	Separated Water Treatment Tank
CB-4	21,401	Sludge/Water Holding Tank
VR-1	5,875	Waste Storage
VR-2	5,287	Waste Storage
VR-3	5,287	Waste Storage
LS-1	10,528	Lime Slurry Storage Tank
BFS-1	17,000	Boiler Fuel Storage Tank
BFS-2	1,500	Boiler Fuel Storage Tank
RT-1	5,875	Recirculation Tank



SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 2

Type: 600 Drum Storage Area

Unit Description: The drum area is also diked with concrete and  
is attached to the Tank Storage and Treatment Area.

Date of Start Up: 8-24-84

Date of Closure: active

Method of Closure: \_\_\_\_\_

Waste Description: All types of waste are stored subject to compatability.  
See the attached Supplemental permit (page 47)



SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 3 Type: Containerized Storage in Van Trailers

Unit Description: This unit is southwest of the 600 drum storage area and consists of an asphalt pad with a 2 inch berm that will hold 10 trailers with approximately 80 drums per trailer. The area is about 50' x 90'.

Date of Start Up: March 10, 1988

Date of Closure: active

Method of Closure: \_\_\_\_\_

Waste Description: Same as SWMU 1 and 2



SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 4

Type: Shedder Unit

Unit Description: Shed-pax AZ-15 with 160 drum storage and 5 550  
gallon process liquid waste storage tanks

Date of Start Up: March 1988

Date of Closure: Sept. 1, 1988

Method of Closure: Burned up, Insurance company is investigating.  
At this time, cause of fire is still unknown.

Waste Description: Consumer products (aerosol cans, etc.)



SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 5

Type: Roll-off boxes

Unit Description: One 15 cubic yard and one 20 cubic yard  
(see pictures)

Date of Start Up: UNKNOWN

Date of Closure: active

Method of Closure: \_\_\_\_\_

Waste Description: 15 cubic yard holds metals while 20 cubic yard  
holds miscellaneous debris



SOLID WASTE MANAGEMENT UNIT EVALUATION

SWMU No.: 6 Type: drum crusher

Unit Description: (see picture)

Date of Start Up: UNKNOWN

Date of Closure: active

Method of Closure: \_\_\_\_\_

Waste Description: drums that will go to metal recycler



EPA Waste Number: \_\_\_\_\_

Release Controls: A 5' dike exist around the 23 Tank Storage and Treatment area as well as the 600 Drum Storage area which enable these areas to hold 110% of thier total volumes. Certain tanks and vessels in the Tank Storage and Treatment area are equipped with relief valves that pass vapors through a carbon absorber control device prior to release. The central drainage ditch that enters the canal can be blocked to intercept a spill.

History of Release: ON 2-19-85, 150-200 gallons of 28% caustic was lost to the Sanitary and Ship Canal when a barge hose ruptured. They reported 95% clean-up. IN July of 1988, a reaction in a trailer sent approximately 5 pounds of lithium aluminum hydrate into the air. ON September 1, 1988, the Shedder Unit fire created another air release.

#### Observed/Potential Releases

Soils: No soils exist on site. The site sits directly on top of Niagaran dolomite. No observed releases were noted.

Groundwater: Although the Niagaran dolomite has fractures, the diked areas would not permit such a release.



Air: Other than the July and September 1988 releases, NO  
visual or olfactory releases were noted

Subsurface Gas: NONE NOTED

Surface Water: NONE NOTED

#### Exposure Potential

Direct Contact: The exposure potential via direct contact is minimized  
by a 8 foot fence around the site other than the Canal and  
barge slip areas where a 5 foot shear would be encountered.

Groundwater Route: One mile south of the site a lemon + public well  
is open to the Niagaran dolomite (uncased from 128'-241')  
continuous with the aquifer underlying Petrochem



Air Route: Within 1/2 mile of the site, there are few residential dwellings but within 4 miles of the site, there are greater than 10,000 people

Sensitive Environments: None Noted

Suggested Further Act: RCRA inspections should continue



Evaluation Summary: Petrochem Services, Inc. generates about 45,000 gallons of hazardous waste fuel (D001, F003, F005) per month. Since the facility started accepting waste in 1984, only three minor releases have occurred. Overall, the facility is operating within RCRA regulations. Routes of Contamination have been held in check by dikes, berms and air filtration canisters on certain vessels. Under CERCLA, the facility does not warrant a Screening Site Inspection

TJM:jab/sp87k



L0311620007

520401-AD403

NFA-444  
4/27/89

POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

## I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
1LD 085349264

## II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)

Petrochem Services, Inc.

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

Canal Bank Road N.E. (P.O. Box 337)

03 CITY

Lemont

04 STATE

05 ZIP CODE

06 COUNTY

07 COUNTY CODE

08 CONG DIST

IL

60439

Cook

031

09 COORDINATES LATITUDE

41 42 00.5

LONGITUDE

088 59 10.0

Sag Bridge, IL

N4137.5 - W0752.5/25 54B

10 DIRECTIONS TO SITE (Starting from nearest public road)

From Interstate 55, take Lemont Road south 2.5 miles to Canal Bank Road N.E. (gravel road)  
Site is located 0.5 mile east of Lemont Road (Stephen St.) between the Chicago Sanitary  
and Ship Canal and the Des Plaines River

## III. RESPONSIBLE PARTIES

01 OWNER (If known)

Heritage Environmental Services, Inc.

02 STREET (Business, mailing, residential)

7901 West Morris Street

03 CITY

Indianapolis

04 STATE

05 ZIP CODE

06 TELEPHONE NUMBER

IN

46231

13171243-0811

07 OPERATOR (If known and different from owner)

08 STREET (Business, mailing, residential)

09 CITY

10 STATE

11 ZIP CODE

12 TELEPHONE NUMBER

( )

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL:

(Agency name)

☐ C. STATE☐ D. COUNTY☐ E. MUNICIPAL☐ F. OTHER:

(Specify)

☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3001 DATE RECEIVED: 9, 8, 83

MONTH DAY YEAR

☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: / /

MONTH DAY YEAR

☐ C. NONE

## IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

☒ YES DATE

10, 27, 81

☐ NO

MONTH DAY YEAR

9/30/88

3/28/86

6/28/88

BY (Check all that apply)

☐ A. EPA☐ B. EPA CONTRACTOR☒ C. STATE☐ D. OTHER CONTRACTOR☐ E. LOCAL HEALTH OFFICIAL☐ F. OTHER:

(Specify)

CONTRACTOR NAME(S):

02 SITE STATUS (Check one)

☒ A. ACTIVE☐ B. INACTIVE☐ C. UNKNOWN

03 YEARS OF OPERATION

1977

Present

☐ UNKNOWN

BEGINNING YEAR

ENDING YEAR

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

This RCRA regulated facility accepts a wide variety of used oils, sludges, solvents, etc. for treatment

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

None noted or observed

## V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☐ A. HIGH

(Inspection required promptly)

☐ B. MEDIUM

(Inspection required)

☐ C. LOW

(Inspect on time available basis)

☒ D. NONE

(No further action needed, complete current disposition form)

## VI. INFORMATION AVAILABLE FROM

01 CONTACT

Michael J. Crafton

02 OF (Agency/Organization)

Heritage Environmental Services, Inc.

03 TELEPHONE NUMBER

13171243-0811

04 PERSON RESPONSIBLE FOR ASSESSMENT

Timothy J. Murphy

05 AGENCY

IEPA

06 ORGANIZATION

RPMS

07 TELEPHONE NUMBER

12171785-5737

08 DATE

1, 9, 89

MONTH DAY YEAR



IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OLW	oil/water separator wastes				
OLW	bilge oil wastes				
OLW	oily wash waters from cleaning				
OLW	spill clean-up residues				
OLW	pipeline interfaces and transmixes				
SOL	mineral spirits				
SOL	Napthas				
SOL	paraffin solvents				
SOL	plasticizers				
SOL	styrene				
SOL	jet fuel				
SOL	gasoline				
SOL	heptane				
SOL	cyclohexane	110821			
SOL	hexane				
SOL	kerosene				
SOL	lacquer thinner				
SOL	stoddard's solvent		1 storage		
SOL	turpentine		2 treatment		
SOL	isoprene	78795	3 blending into fuels		
SOL	pentane		4 recycling		
SOL	hexene's		5 blending for off-site incineration		
SOL	isopentane		6 shredding for volume reduction		
SOL	methyl cyclohexane				
SOL	isotane				
SOL	tetrachloroethylene	127184			
SOL	trichloroethylene	79016			
SOL	methylene chloride	75092			
SOL	1,1,1-trichloroethane	71556			
SOL	carbon tetrachloride	56235			
SOL	chlorinated fluorocarbons				
SOL	chlorobenzene	108907			
SOL	1,1,2-trichloro-1,2,2-trifluoroethane	76131			
SOL	orthodichlorobenzene				
SOL	trichloro fluoromethane	75694			
SOL	dichlorobenzene	253212 26			
SOL	xylene				
SOL	benzene	71432			
SOL	toluene				
SOL	cumene	98828			
SOL	cresols	1319773			
SOL	cresylic acid	1319773			
SOL	Nitrobenzene				
SOL	ethyl benzene	100414			
SOL	ethyl acetate	141786			
SOL	vinyl acetate				
SOL	diethyl phthalate				
SOL	diethyl phthalate	84662			



IV. HAZARDOUS SUBSTANCES See Appendix for most frequently cited CAS Numbers

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Methyl acetate				
SOL	isobutyl acetate				
SOL	isopropyl acetate				
SOL	isoamyl acetate	123922			
SOL	amyl acetate	628637			
SOL	ethyl methyl acrylate				
SOL	ethyl acrylate	140885			
SOL	ethanol				
SOL	ethylene glycol				
SOL	butanol	71363			
SOL	isobutyl alcohol	78831			
SOL	methanol				
SOL	isoamyl alcohol				
SOL	tert amyl alcohol				
SOL	cyclohexanol				
SOL	diacetone alcohol				
SOL	2-ethyl-1-butanol				
SOL	2-ethyl-1-hexanol		1 Storage		
SOL	ethyl butanol		2 treatment		
SOL	isopropyl alcohol		3 blending into fuels		
SOL	2-methyl-2-butanol		4 recycling		
SOL	propanol		5 blending for off-		
SOL	2-methyl-1-propanol	78831	site incineration		
SOL	N-octanol		6 shredding for volume		
SOL	acetone	67641	reduction		
SOL	methyl ethyl ketone	78933			
SOL	Methyl isobutyl ketone	108191			
SOL	diacetone alcohols				
SOL	acetophenone	98882			
SOL	diisobutyl ketones				
SLU	DAF float - K048				
SLU	slip oil emulsion solids - K049				
SLU	heat exchange bundle cleaning sludge - K050				
SLU	API separator (leaded) - K051				
SLU	tank bottoms (leaded) - K052				
SLU	ink formulation waste - K086				
BAS	sodium hydroxide	1310732			
BAS	potassium hydroxide				
BAS	wastewaters and bottoms containing NaOH and KOH				
ACD	Sulfuric acid				
ACD	phosphoric acid				
ACD	wastewaters and bottoms containing sulfuric and phosphoric acid				
OCC	soaps and detergents				
BAS	alkaline cleaners				
OCC	air fresheners				



## IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS numbers)

[illegible]





POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
ILD 085349264

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_  
(Acres)

*No soil exists on site, facility sits directly on top of a fractured dolomite and sandstone deposit*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

*None noted or observed*

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED



# Supporting Documentation



<u>Number</u>	<u>Document</u>	<u>Page</u>
001	Operating Permit # 1983-5-OP	33
002	Supplemental Permit # 1986-116-SP	47
003	Summary of 9-30-88 Inspection	65
004	Parts of IEPA DLPC File L0311620007	66
005	Flood Plain Insurance Map	68



Log A-179

Document 001:1



Petrochem Services, Inc.

P.O. Box 337

Lemont, Illinois 60439

(312) 739-1150

February 25, 1988

Illinois EPA  
Division of Land Pollution Control  
2200 Churchill Road  
P.O. Box 19275  
Springfield, IL 62794-9276

Attention: Mark Scholenberger

Reference: Revised Part A for Petrochem Services, Inc.

Dear Mark Scholenberger:

Enclosed please find a revised RCRA Part A Application for Petrochem Services, Inc. This revision is made in response to USEPA recommendations that this Part A Application be utilized in accordance with the procedures outlined in 40 CFR Part 270.72 (b) and (c).

It is further understood that no additional public notification is required for Petrochem Services, Inc. to change the volumes associated with tank storage capacities.

If you should have any questions or need additional information please feel free to call.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark Schiefelbein". The signature is fluid and cursive.

Mark Schiefelbein  
Technical Services

MS:lw

Enclosure

cc: USEPA Region V, w/Enclosure

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CONTINUED FROM THE FRONT

## VII. SIC CODES (4-digit, in order of priority)

A. FIRST				B. SECOND			
7	4	4	6	7			
C. THIRD				D. FOURTH			
				7			

## VIII. OPERATOR INFORMATION

A. NAME												B. Is the name listed in Item VIII-A also the owner?	
8 PETROCHEM SERVICES, INC.												<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)												D. PHONE (area code & no.)			
F = FEDERAL				M = PUBLIC (other than federal or state)				P (specify)				A 3 1 2 7 3 9 1 1 5 0			
S = STATE				O = OTHER (specify)											
P = PRIVATE															

E. STREET OR P.O. BOX											
P. O. BOX 337											

F. CITY OR TOWN						G. STATE		H. ZIP CODE		IX. INDIAN LAND	
B L E M O N T						I L		6 0 4 3 9		Is the facility located on Indian lands?	
										<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	

## X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)						D. PSD (Air Emissions from Proposed Sources)					
9 N N/A						9 P					
B. UIC (Underground Injection of Fluids)						E. OTHER (specify)					
9 U N/A						0 3 1 8 0 6 A A Y (specify) ILLINOIS AIR PERMIT					
C. RCRA (Hazardous Wastes)						E. OTHER (specify)					
9 R I L D 0 8 5 3 4 9 2 6 4						0 3 1 1 6 2 0 0 0 7 (specify) ILLINOIS LAND PERMIT					

## XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

## XII. NATURE OF BUSINESS (provide a brief description)

Petrochem Services, Inc. is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. The Facility engages in various storage & treatment technologies of hazardous & non hazardous waste which results in the production of recycled materials, fuels, hazardous waste fuels, off spec oil and enhanced disposal streams. Petrochem also serves as a Generator, Transporter, Marketer and burner of hazardous waste fuels.

## XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)		B. SIGNATURE		C. DATE SIGNED	
George A. Smith		<i>George A. Smith V. Pres</i>		2/24/88	
COMMENTS FOR OFFICIAL USE ONLY					



<b>FORM</b> <b>3</b>	<b>EPA</b>	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> <b>HAZARDOUS WASTE PERMIT APPLICATION</b> Consolidated Permits Program <i>(This information is required under Section 3005 of RCRA.)</i>	<b>I. EPA I.D. NUMBER</b> <div style="border: 1px solid black; padding: 2px;">             F I L D 0 8 5 3 4 9 2 6 4 1 1           </div>
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**FOR OFFICIAL USE ONLY**

APPLICATION DATE RECEIVED  
APPROVED (yr., mo., & day)

COMMENTS

**II. FIRST OR REVISED APPLICATION**

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

**A. FIRST APPLICATION** (place an "X" below and provide the appropriate date)

☒ 1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

☐ 2. NEW FACILITY (Complete item below.)

C	YR.	MO.	DAY
8	08	05	20

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

YR.	MO.	DAY

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

**B. REVISED APPLICATION** (place an "X" below and complete item I above)

☒ 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

**III. PROCESSES - CODES AND DESIGN CAPACITIES**

**A. PROCESS CODE** - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

**B. PROCESS DESIGN CAPACITY** - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PRO- CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<b>Storage:</b>			<b>Treatment:</b>		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	S02	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS		T04	GALLONS PER HOUR OR LITERS PER HOUR
<b>Disposal:</b>			OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)		
INJECTION WELL	D79	GALLONS OR LITERS			
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER			
LAND APPLICATION	D81	ACRES OR HECTARES			
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS			
	UNIT OF MEASURE CODE			UNIT OF MEASURE CODE	
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H		

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IEPA-DLP UNIT OF MEASURE CODE

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

<div style="display: flex; justify-content: space-between;"> <span>C</span> <span>DUP</span> <span>1</span> </div>									
LINE NUMBER	A. PRO- CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO- CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	85,800	G		7				
2	S 0 2	435,734 354,861	G		8				
3	T 0 1	45,000	U		9				
4	T 0 4	50,000	U		10				



A Form 3510-3 (6-80)



EPA I.D. NUMBER (enter from page 1)										FOR OFFICIAL USE ONLY									
WASTE IDENTIFICATION										WASTE DESCRIPTION									
DESCRIPTION OF HAZARDOUS WASTES (continued)																			
WASTE NO.	A. EPA HAZARD WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES												
	1	2	3	4			1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))								
	1	2	3	4			1	2	3	4	5	6	7	8	9	10			
1	U	0	2	0	137	T	S	0	1	S	0	2	T	0	1	T	0	4	
2	U	1	5	4	70	T	S	0	1	S	0	2	T	0	1	T	0	4	
3	D	0	0	1														Included with above	
4	U	2	2	0	350	T	S	0	1	S	0	2	T	0	1	T	0	4	
5	D	0	0	1														Included with above	
6	U	2	3	9	350	T	S	0	1	S	0	2	T	0	1	T	0	4	
7	D	0	0	1														Included with above	
8	U	0	5	2	200	T	S	0	1	S	0	2	T	0	1	T	0	4	
9	U	2	2	6	300	T	S	0	1	S	0	2	T	0	1	T	0	4	
10	U	1	5	9	350	T	S	0	1	S	0	2	T	0	1	T	0	4	
11	D	0	0	1														Included with above	
12	U	0	6	1	175	T	S	0	1	S	0	2	T	0	1	T	0	4	
13	D	0	0	1														Included with above	
14	U	2	1	0	300	T	S	0	1	S	0	2	T	0	1	T	0	4	
15	U	1	0	7	90	T	S	0	1	S	0	2	T	0	1	T	0	4	
16	U	0	8	8	90	T	S	0	1	S	0	2	T	0	1	T	0	4	
17	D	0	0	1	2500	T	S	0	1	S	0	2	T	0	1	T	0	4	
18	D	0	0	2	2500	T	S	0	1	S	0	2	T	0	1	T	0	4	
19	D	0	0	3	250	T	S	0	1	S	0	2	T	0	1	T	0	4	
20	D	0	0	7	800	T	S	0	1	S	0	2	T	0	1	T	0	4	
21	D	0	0	8	2000	T	S	0	1	S	0	2	T	0	1	T	0	4	
22	D	0	0	6	400	T	S	0	1	S	0	2	T	0	1	T	0	4	
23	D	0	0	5	400	T	S	0	1	S	0	2	T	0	1	T	0	4	
24	D	0	0	4	400	T	S	0	1	S	0	2	T	0	1	T	0	4	
25	D	0	0	6	1000	T	S	0	1	S	0	2	T	0	1	T	0	4	
26	U	0	5	1	90	T	S	0	1	S	0	2	T	0	1	T	0	4	



Form 3510-3 (16-80)

DESCRIPTION OF HAZARDOUS WASTES (continued)

DUP

DUP

NO	A. EPA HAZARDOUS WASTE NO (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	U 0 4 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
2	U 2 2 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
3	U 1 1 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
4	U 1 0 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
5	U 0 9 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
6	U 1 1 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
7	F 0 0 4	2500	T	S 0 1 S 0 2 T 0 1 T 0 4	
8	F 0 0 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
9	F 0 1 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
10	F 0 0 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
11	F 0 0 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
12	F 0 0 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
13	F 0 1 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
14	F 0 1 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
15	K 0 0 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
16	K 0 0 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
17	K 0 0 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
18	K 0 0 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
19	K 0 0 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
20	K 0 0 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
21	K 0 0 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
22	K 0 2 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
23	K 0 2 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
24	K 0 2 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
25	0 9 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
26	K 0 9 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	



EPA ID NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY	
W 1002524011	DUP	12 DUP

## IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

WASTE NO. (enter code)	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in 3, 4, 5)
1	K 0 2 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
2	K 0 2 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
3	K 0 9 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
4	K 0 9 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
5	K 0 8 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
6	K 1 0 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
7	K 0 3 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
8	K 0 3 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
9	K 0 4 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
10	K 0 9 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
11	K 0 6 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
12	K 0 8 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
13	P 0 0 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
14	P 0 1 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
15	P 0 1 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
16	P 0 2 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
17	P 0 2 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
18	P 0 2 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
19	P 0 2 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
20	P 0 3 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
21	P 0 3 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
22	P 0 3 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
23	P 0 4 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
24	P 0 7 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
25	P 0 6 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
26	P 0 6 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	



Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 25 wastes to list.

Form Approved OMB No. 58-580004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY	
W I L D 0 8 5 3 4 0 2 6 4 1 1	W D U P	D U P

## IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

WASTE NO.	A. EPA HAZARD WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES							
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in 2(1))			
1	P 0 7 4	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
2	P 0 8 9	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
3	P 0 9 4	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
4	P 0 4 3	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
5	P 0 4 0	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
6	P 0 9 7	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
7	P 0 9 8	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
8	P 0 7 5	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
9	P 1 1 1	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
10	P 1 0 4	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
11	P 1 0 6	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
12	P 1 0 8	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
13	P 1 1 0	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
14	P 1 2 3	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
15	P 1 2 0	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
16	P 1 2 1	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
17	U 0 0 7	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
18	U 0 0 8	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
19	U 0 0 9	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
20	U 0 1 2	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
21	U 0 7 0	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
22	U 0 7 1	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
23	U 0 7 2	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
24	U 1 5 9	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
25	U 2 1 1	90	T	S 0 1	S 0 2	T 0 1	T 0 4				
26	U 0 3 7	90	T	S 0 1	S 0 2	T 0 1	T 0 4				



NOTE: Photocopy this page before completing if you have more than 25 wastes in list.

Form Approved OMB No. 58-580004

EPA I.D. NUMBER (enter from page 1)	FOR OFFICIAL USE ONLY	
LD 085340264	W DUP	12 DUP

## IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

WASTE NO. 1-25	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (If a code is not entered in 2(1))
1	U 0 4 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
2	U 0 5 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
3	U 2 4 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
4	U 0 7 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
5	U 0 7 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
6	U 0 8 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
7	U 0 8 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
8	U 0 8 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
9	U 0 9 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
10	U 0 0 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
11	U 1 1 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
12	U 1 1 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
13	U 1 2 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
14	U 1 2 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
15	U 2 1 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
16	U 1 2 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
17	U 1 2 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
18	U 1 2 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
19	U 1 3 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
20	U 1 3 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
21	U 1 4 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
22	U 1 4 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
23	U 1 2 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
24	U 1 4 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
25	U 1 5 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
26	U 1 5 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	



Continued from page 2.

TE Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)

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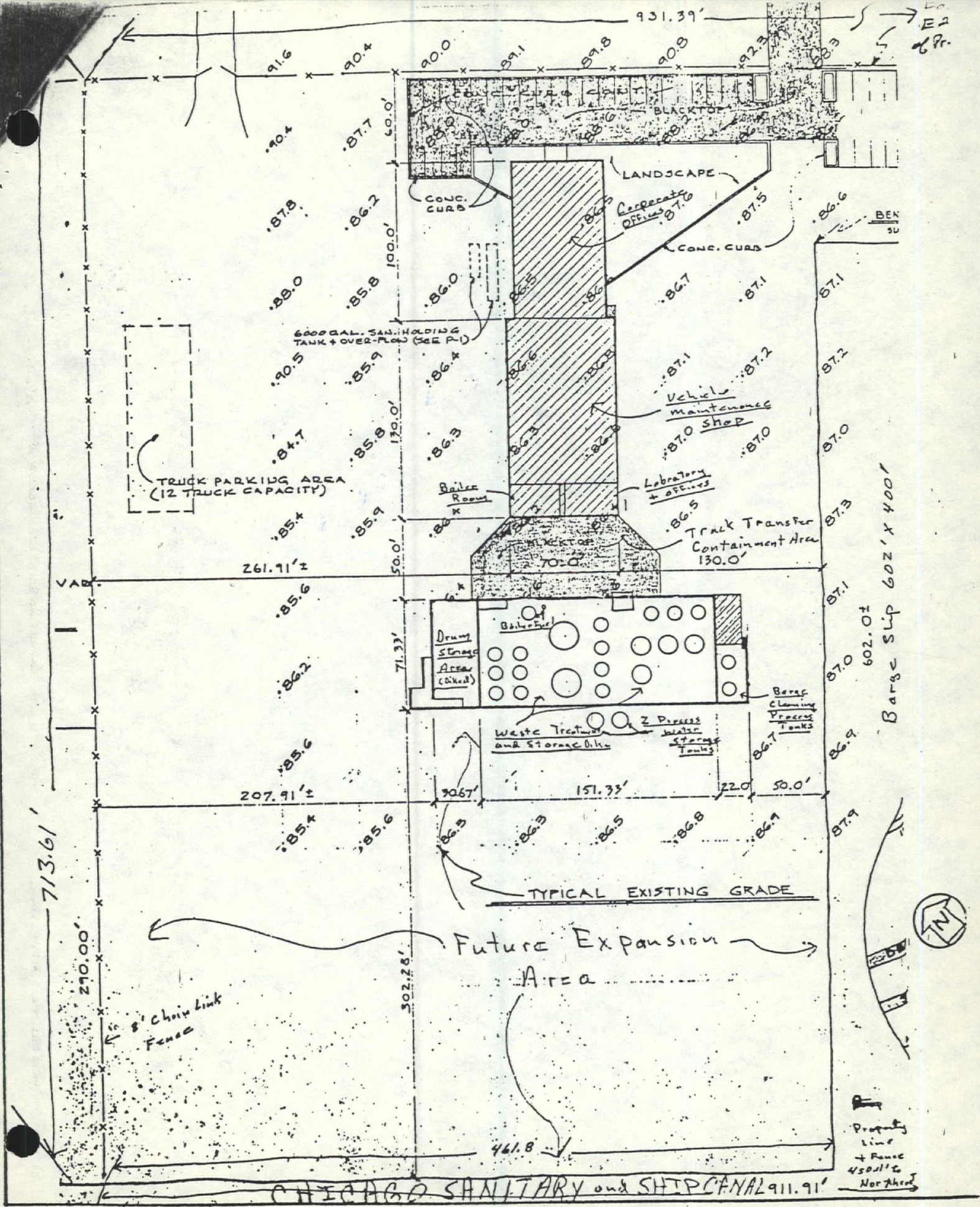
DUP

DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

WASTE NO.	A. EPA HAZARDOUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	U 2 4 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
2	U 2 2 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
3	U 1 6 1	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
4	U 1 6 2	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
5	U 1 6 5	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
6	U 1 6 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
7	U 1 8 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
8	U 1 9 0	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
9	U 1 9 6	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
10	U 2 0 4	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
11	F 0 2 7	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
12	U 2 0 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
13	U 2 0 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
14	U 2 1 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
15	U 2 2 3	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
16	U 2 2 8	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
17	U 2 4 9	90	T	S 0 1 S 0 2 T 0 1 T 0 4	
18					
19					
20					
21					
22					
23					
24					
25					
26					







PART A LOG: A179

SITE NO. : 0311620007

NAME : PETROCHEM

USEPA I.D : ILD085349264

CITY : LEMONT

COUNTY : COOK

TYPE (LN, NW, PO, SO, SE, OT) :

REVIEWER : YAS

DATE REC'D : 88/01/21

DATE MAILED: 88/03/14

APP/DEN/FE: APP

CR/PART A:

NOTIFY FOS:

PROCESS1:	AMOUNT 1:
PROCESS2:	AMOUNT 2:
PROCESS3:	AMOUNT 3:
PROCESS4:	AMOUNT 4:
PROCESS5:	AMOUNT 5:
PROCESS6:	AMOUNT 6:

UNIT 1:	ADD/DEL 1:
UNIT 2:	ADD/DEL 2:
UNIT 3:	ADD/DEL 3:
UNIT 4:	ADD/DEL 4:
UNIT 5:	ADD/DEL 5:
UNIT 6:	ADD/DEL 6:

COMMENTS :





217/782-6762

Refer to: 0311620007 -- Cook  
Petrochem Services  
Permit File  
Log 1987-263

March 10, 1988

Petrochem Services, Inc.  
Attn: George A. Smith  
P.O. Box 337  
Lemont, IL 60439

Gentlemen:

This letter is to inform you that the Agency has revised your Operating Permit 1983-5-OP to include the following modifications:

- A. To allow fuel blending in Tanks ST-2, ST-3 and ST-5.
- B. To permit wastes with a vapor greater than 1.5 psia or with a flash point less than 100F to be stored or treated in Tanks OS-2, ST-1, ST-4 and ST-6.
- C. To increase the type of waste streams which can be accepted.
- D. To expand the drum crushing operation to cover empty drums received from off site.
- E. To allow containerized storage in van trailers.
- F. To allow additional consumer products to be accepted for the shredder unit.
- G. The clarification of site operations as outlined in your letter of February 18, 1988.

Additional modification requests to your operating permit were not granted because you have failed to provide proof that granting this permit would not result in violations of the Ill. Environmental Protection Act. Section 39(a) of the Illinois Environmental Protection Act (Ill. Rev. Stat., 1979, Ch. 111 1/2, par. 1039(a)) requires the Agency to provide the applicant with specific reasons for the denial of permit. The following reason(s) are given:

- A. In regards to dropping the list of solvents suitable for fuel blending or off-site incineration it was not the intent of the Agency to replace the supplemental waste stream system with the generic permit nor to allow the permittee to decide what wastes are suitable for fuel blending or off-site incineration without first consulting the Agency through the above mechanisms. Additionally, it was not felt that all wastes approved to be received were suitable for fuel blending due to their low BTU value, high flash point or classification as nonflammable. If these materials are to be reconsidered by the Agency at a later date the following information





Page 2

1. justification why the material is better handled through fuel blending than off-site incineration.
2. what percentage of chlorine is in the fuel
3. a copy of the contract which allows chlorine at these levels in the fuel
4. how long are these type of wastes stored before they are blended
5. do the burner of these wastes have an air permit which allows this composition of fuel to be burned.

Additionally your revised closure plan dated February 26, 1985 and your revised part A dated February 25, 1988 have been reviewed and approved.

Should you wish to reapply or have any questions regarding this application, please contact Mark A. Schollenberger at 217/782-9799.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/0207j/sp

Enclosures

cc: Northern Region  
Division File  
DAPC - Jim Cobb  
Compliance Monitoring  
Jeanetter Virgillo - RUI, Inc.





Illinois Environmental Protection Agency 2200 Churchill Road, Springfield, IL 62706

217/782-6762

Refer to: 0311620007 -- Cook County  
Petrochem Services, Inc.  
ILD085349264  
Permit No. 1983-5-OP  
Log No. 1987-263 (1987-15, 1986-164 1986-39)

July 17, 1987  
Revised April 15, 1987  
Revised March 10, 1988

Petrochem Services, Inc.  
Attention: George E. Smith  
P.O. Box 337  
Lemont, IL 60439

Gentlemen:

Permit is hereby granted to the above facility to operate a waste site consisting of 17 acres in the N 1/2 of Section 21, Township 37 N. Range 11E, 3rd P.M. (as more fully described in the original application) to store, treat and/or reclaim waste, surplus or off-specification materials.

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified on the records of the Illinois Environmental Protection Agency by the permit number(s) and log number(s) designated in the heading above.

This permit is issued subject to the standard conditions attached hereto and incorporated herein by reference and further subject to the following special conditions:

1. This permit allows Petrochem to operate the following units:

a.

<u>Tank Designation</u>	<u>Volume Per Tank (Gals.)</u>	<u>Usage</u>
ST-1	7,686	Waste/Product Storage and Fuel Blending
ST-2	10,380	Waste/Product Storage and Fuel Blending
ST-3	11,177	Waste/Product Storage and Fuel Blending
ST-4	10,981	Waste/Product Storage and Fuel Blending





ST-5	7,686	Waste/Product Storage and Fuel Blending
ST-6	7,686	Waste/Product Storage and Fuel Bending
OS-1	62,375	Waste/Product Oil Storage
OS-2	62,375	Waste/Product Oil Storage and Fuel Bending
HT-1	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-2	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-3	19,828	Heat/Treatment and Waste/Product Oil Storage
HT-4	19,828	Heat/Treatment and Waste/Product Oil Storage
CB-1	21,401	Oily Waste Treatment/Holding Tank
CB-2	21,401	Oily Waste Treatment/Holding Tank
CB-3	21,401	Separated Water Treatment Tank
CB-4	21,401	Sludge/Water Holding Tank
VR-1	5,875	Waste Storage
VR-2	5,287	Waste Storage
VR-3	5,287	Waste Storage
WS-1	28,481	Water Storage Tanks
WS-2	28,481	Water Storage Tanks
LS-1	10,528	Lime Slurry Storage Tank
PT-1	550	Process Liquid Waste Storage from Shedding Unit ONLY
PT-2	550	Process Liquid Waste Storage from Shedding Unit ONLY





Page 3

PT-3	550	Process Liquid Waste Storage from Shedding Unit ONLY
PT-4	550	Process Liquid Waste Storage from Shedding Unit ONLY
PT-5	550	Process Liquid Waste Storage from Shedding Unit ONLY

## b. Container Storage Areas

<u>Unit Designation</u>	<u>Volume</u>	<u>Usage</u>
Drum Storage Area 1	600 drums	Waste Drum Storage
Drum Storage Area 2	160 drums/ 55 gal drum	Waste Drum Storage for the Shredding System ONLY
Storage roll-off boxes	(1) 15 C.Y. (1) 20 C.Y.	Solid Waste Storage for landfill disposal
Containerized Storage in van trailers	(10) 80 drums/ 55 gal drum	Waste Drum Storage

## c. Processing Units

1. Plate and frame filter press unit
  2. Boiler with Fuel Storage Tanks
  3. Heat Exchangers (2)
  4. Shed-pax AZ-15 shredder with conveyors, fire suppression, exhaust and liquid collection systems
  5. All corresponding sumps, pumps, piping controls, filters, loading and unloading areas and appurtenances.
2. Waste, surplus and off-specification materials for storage, treatment, recycling, blending into fuels, blending for off-site incineration or shredding for volume reduction shall be limited to the following:

## a. Oils

1. engine lube oils
2. transmission fluids
3. hydraulic oils





Page 4

4. insulating fluids and coolant oils
5. metal working fluids (cutting, grinding, machine, rolling, stamping and quenching oils)
6. turbine oils
7. gear oils
8. greases
9. distillate and residual fuel oils
10. tallows
11. vegetable oils
12. paraffins
13. mineral oils
14. petroleum refining intermediates (cycle, decant and slop oils)
15. asphalt
16. sulfonate oil
17. oil/water separator wastes
18. bilge oil wastes
19. oily washwaters and bottoms of the above from barge and tank cleaning operations
20. spill clean-up residues of the above
21. pipeline interfaces and transmixes of the above

b. Solvents\*

Non-halogenated Aliphatics:

1. mineral spirits
2. naphthas
3. paraffin solvents
4. plasticizers
5. styrene
6. jet fuel
7. gasoline
8. heptane
9. cyclohexane
10. hexane
11. kerosene
12. lacquer thinner
13. stoddard's solvent
14. turpentine
15. isoprene
16. pentane
17. hexene's
18. isopentane
19. methyl cyclohexane
20. isooctane

Non-halogenated Aromatics

1. xylene
2. benzene
3. toluene

Halogenated Aliphatics:

1. tetrachloroethylene
2. trichloroethylene
3. methylene chloride
4. 1,1,1-trichloroethane
5. carbon tetrachloride
6. chlorinated fluorocarbons
7. chlorobenzene
8. 1,1,2-trichloro-  
1,2,2-trifluoroethane
9. orthodichlorobenzene
10. trichlorofluoromethane
11. dichlorobenzene

Esters

1. ethyl acetate
2. vinyl acetate
3. dioctyl phthalate





4. cumene
5. cresols
6. cresylic acid
7. nitrobenzene
8. ethyl benzene

4. diethyl phthalate
5. methyl acetate
6. isobutyl acetate
7. isopropyl acetate
8. isoamyl acetate
9. amyl acetate
10. ethyl methyl acrylate
11. ethyl acrylate

Alcohols:

1. ethanol
2. ethylene glycol
3. butanol
4. isobutyl alcohol
5. methanol
6. isoamyl alcohol
7. tert amyl alcohol
8. cyclohexanol
9. diacetone alcohol
10. 2-ethyl-1-butanol
11. 2-ethyl-1-hexanol
12. ethyl butanol
13. isopropyl alcohol
14. 2-methyl 2-butanol
15. propanol
16. 2-methyl-1-propanol
17. n-octanol

Ketones:

1. acetone
2. MEK
3. MIBK
4. diacetone alcohols
5. acetophenone
6. diisobutyl ketones

\*This includes still bottoms from recovery, tank bottoms, washwaters and spill clean-up residues of the above.

## c. Hazardous waste from specific sources

1. DAF float - K048
2. slop oil emulsion solids - K049
3. heat exchange bundle cleaning sludge - K050
4. API separator (leaded) - K051
5. tank bottoms (leaded) - K052
6. ink formulation waste - K086

## d. Corrosive Waste

1. sodium hyrdoxide
2. potassium hydroxide
3. wastewaters and bottoms containing NaCH and KOH from tank or barge cleaning operations
4. sulfuric acid
5. phosphoric acid
6. wastewaters and bottoms from sulfuric and phosphoric acid storage tank cleaning operations





e. Aerosol and non-aerosol products for the shedder system only:

1. soaps and detergents
2. alkaline cleaners
3. air fresheners
4. health and beauty aids
5. petroleum products
6. food products
7. paints and related products
8. construction products, i.e.: adhesives, cements, insulation

f. Additional solvents available only for storage, recycling, and off-site incineration.

1. creosote
2. 1-3 butylene glycol
3. propylene glycol
4. chloroform
5. perchloroethylene
6. 1,1,2-trichloroethane
7. dimethyl phthalate
8. di-n-butyl phthalate

3. This permit also allows for the temporary storage of wastes in containers (of those not identified above) resulting from emergency response spill clean-up for purposes of sampling, analysis and staging for off-site treatment, disposal, incineration or recovery.

4. Treatment, as permitted herein, is limited to:

a. Oil/hydrocarbon treatment system consisting of physical and chemical separation processes (clarification, coagulation, flocculation, flotation, decanting, sedimentation, filtration, chemical treatment, and heating) to remove and separate water and solids from the hydrocarbon phase of wastes, which shall also include the following pre-treatment processes:

1. Reactive waste neutralization for sulfides (maximum allowable concentration at 1000 ppm) in oils and oil/hydrocarbon mixtures using sodium hypochlorite as an oxidizing agent.
2. Reduction of hexavalent chrome contaminated cooling oils (maximum allowable concentration at 1000 ppm) utilizing sodium hydrosulfite.
3. Acid pre-treatment of oil and oil/water emulsions.

b. Acid/base neutralization.





Page 7

- c. Blending oils/hydrocarbon mixtures into supplementary fuels or for purposes of off-site incineration.
- d. Solids conditioning with lime (of wastes generated from other on-site processes).
- e. Solids dewatering (of waste generated from other on-site processes) using a plate and frame filter press.
5. Any wastes or materials with a vapor pressure greater than 1.5 psia or with a flash point less than 100F shall be stored or treated in the vapor controlled storage/treatment system consisting of tanks labeled OS-2, ST-1, ST-2, ST-3, ST-4, ST-5, ST-6, HT-4, CB-2, CB-3 and CB-4.
6. Reactive sulfide neutralization and hexavalent chrome reduction shall be conducted only in the tank designated as VR-1.
7. This facility cannot accept any wastes containing polychlorinated biphenols (PCBs) at a concentration greater than 10 ppm.
8. Each waste stream received for storage or treatment shall be analyzed and processed in accordance with the procedures described in the application to assure that:
  - a. The waste stream is properly classified, and
  - b. None of the following wastes are accepted for treatment:
    1. Reactive wastes (other than sulfide reactive oil mixtures with a sulfide content of 1000 ppm).
    2. Poisonous wastes as defined by 49 CFR, Part 173, Subpart H, Section 173.326 and Section 173.343.
    3. Any waste containing material regulated by the Federal Insecticide, Fungicide and Rodenticide Act, as amended.
9. This 3 Carbon Absorber Control devices on ST-1, St-4, St-6 shall be inspected weekly for deterioration and/or leakage.
10. This facility shall be operated in accordance with this Agency's Division of Air Pollution Control Permits.
11. All loading/unloading of special wastes shall be accomplished over spill containment devices.
12. Drums of special waste shall be stacked a maximum of two high on pallets.





13. All wastes received for fuel blending into the used oil program shall be analyzed for total halogen. To date, the only USEPA approved test method for total halogens is ASTM method D808-81 (i.e. oxygen bomb followed by titrimetric halogen determination). Petrochem shall use the following rebuttal method for determining halogenated solvents in wastes received for blending into fuel to be marketed as used oil:

Used oil or wastes containing more than 1,000 ppm of total halogens is presumed to be hazardous waste unless adequately rebutted by the generators. It is important to note that simply showing that the amount of chlorinated solvents in the oil is less than 1,000 ppm by GC/MS analysis (i.e. SW-846 method 8240) is not an adequate rebuttal to the presumption. For example, if the oil has a total halogen concentration of 3,000 ppm (by ASTM method 808), and the GC/MS analysis indicates 800 ppm of trichloroethylene, the presumption has not been adequately rebutted. The generator must still (1) identify the source(s) of all of the 3000 ppm chlorine and (2) prove that the 800 ppm of trichloroethylene is not the result of mixing the oil with a listed hazardous waste. At a minimum, the rebuttal shall include (1) the concentrations of halogenated solvents as determined by GC/MS Test Methods (i.e. SW-846 method 8240), (2) if available, material safety data sheets for the waste. The MSDS's must include % chlorine in each waste and the source (i.e., chlorinated paraffins) (3) process descriptions of the operations generating the waste. The description should identify the operations (including those which use solvents) raw materials, and products which may introduce chlorine into the process and (4) the generator certification form. A copy of the rebuttals shall be submitted with the renewal application for generic permits.

14. QC Test 6 that was submitted to the Agency on January 22, 1987 shall replace the QC Test 6 for Group I Waste Quality Control Test 6 previously submitted and approved.
15. Special waste received at the site for storage and treatment/recovery shall be transported to the facility utilizing the Agency's supplemental waste stream permit or generic permit system and manifest system.
16. Special wastes generated at the site for disposal, storage, incineration or further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental waste stream permit system and manifest system.
17. This permit is subject to review and modification by the Agency, as deemed necessary to fulfill the intent and purpose of the Environmental Protection Act, and all applicable environmental rules and regulations.
18. This permit is issued with the expressed understanding that no process discharge to waters of the State or to a sanitary sewer will occur from these facilities. If such discharge occurs, additional or alternate facilities shall be provided. The construction of such additional or alternate facilities shall be provided.





Page 9

19. Any modification to the facility shall be the subject of an application for supplemental permit for site modification submitted to this Agency.
20. Permittee shall notify the Agency of any changes from the information submitted to the Agency in its application for a development and operating permit for this site. Permittee shall notify the Agency of any changes in the names or addresses of both beneficial and legal changes in the names or addresses of both beneficial and legal titleholders to the herein-permitted site. Such notification shall be made in writing within fifteen (15) days of such change and shall include the name or names of any parties in interest and the address of their place or abode; or, if a corporation, the name and address of its registered agent.
21. Drums received from off site for crushing which contained hazardous waste must be empty as defined in Section 721.107 of Subtitle G. when received.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/207j/sp

Enclosures

cc: Northern Region  
Compliance Monitoring  
Division File  
Jeanette Virgillio, RUI, Inc.  
DAPC - Jim Cobb





217/782-6762

Refer to: 0311620007 -- Cook  
Petrochem Services  
Permit File  
Log No's 1987-240, 1987-241

March 10, 1988

Petrochem Services, Inc.  
Attn: George A. Smith  
P.O. Box 337  
Lemont, IL 60439

Gentlemen:

This letter is to inform you that the Agency has revised your Generic Permit 1986-116-SP to include the following waste stream modifications:

- A. to replace waste stream components total water and total solids with the component bottom sediment and water for generic permits 000105 through 000118, 000172, 090010 and 090011.
- B. to increase the limit for the component, total halogenated solvent to 10% for generic permits 000112 and 000113.
- C. to increase the limits for the components, arsenic, cadmium, lead and chromium to 1% for generic permits 000105, 000106, 000108, 000110, 000111, 000114, 000115, 000116, 000117, 000172 and 090011.
- D. to add D001, D002, D003, D004 and D006 to USEPA Hax #'s for generic permits, 000106, 000111, 000114, 000115 and 000117.
- E. to add U057, U112, U107, U088, U031, U140, U159, U161, K086, D001, D002, D003, D004, D006, D007, and D008 to USEPA Hax #'s for generic permit 000108.
- F. to add D001, D002, D003, D004, D006, D007, D008 and F004 to USEPA Hax #'s for generic permit 000116.
- G. to add D002, D003, D004, D006, D007 and D008 to USEPA Hax #'s and remove the component chloride and increase to component total halogenated solvents to 10% for generic permit 000172.
- H. to add U057, U112, U107, U088, U031, U140, U159, U161, D001, D003, D004, D006, D007 and D008 to USEPA Haz #'s for generic permit 090011.
- I. to increase the solids component to 100% and water component to 95% and correct the treatment method for generic permits 000119 and 000120.
- J. to add silver as a component of generic permit 000174 and delete the component, total halogenated solvent.





Illinois Environmental Protection Agency 2200 Churchill Road, Springfield, IL 62706

Page 2

- K. to add additional specific waste types for recovery.
- L. to grant a generic permit for RCRA empty drums.

Additional modification requests to your permit were not granted because you have failed to provide proof that granting this permit would not result in violations of the Illinois Environmental Protection Act (Ill. Rev. Stat., 1979, Ch. 111 1/2, par. 1039(a)) requires the Agency to provide the applicant with specific reasons for the denial of permit. The following reason(s) are given:

- A. In regards to creating a generic permit titled "used oil" and one titled "waste, off-spec and surplus oil" as opposed to the one permit currently issued, the Agency does not see the need for this in running the generic permit program.

Should you wish to reapply or have any questions regarding this application, please contact Mark A. Schollenberger at 217/782-9799.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/207j/sp

Enclosures

cc: Northern Region  
Division File  
DAPC - Jim Cobb  
Compliance Monitoring  
Jeanett Virgillio





217/782-6762

Refer to: 0311620007 -- Cook County  
Petrochem Services, Inc.  
ILD085349264  
Permit No. 1983-5-OP (Revised 7/17/86)  
Supplemental Permit No. 1986-116-SP  
Log No's 1987-240 & 1987-241 (1987-154, 1987-016, 1986-116)  
Expiration Date: July 17, 1989

July 17, 1986  
Revised August 28, 1987  
Revised March 10, 1988

Petrochem Services, Inc.  
Attn: George A. Smith  
Post Office Box 337  
Lemont, Illinois 60439

Gentlemen:

Supplemental Permit Number 1986-116-SP is hereby issued to the above facility, to accept for storage and/or pretreatment for purposes of recovery, recycling, blending into supplemental fuels or blending for off-site incineration and aerosol/non-aerosol product shredding the following wastes, surplus or off-specification materials from any IEPA registered generator on a generic basis:

A. For Recovery \*

1. Non-halogenated aliphatics including mineral spirits, naphthas, paraffin solvents, plasticizers, styrene, jet fuel, gasoline, heptane, cyclohexane (U057), hexane, kerosene, lacquer thinner, paint thinner, stoddard solvents, turpentine, isoprene, pentane, hexene, isooctane, isopentane and methyl cyclohexane (see attached Waste Stream Permit Nos. 000112 and 000117);
2. Non-halogenated aromatics including xylene (F003, U239), benzene (U019), toluene (F003, U220) cumene (U055), cresol (F004, cresylic acid (F004) creosote (U051), ethylbenzene (F003) and nitrobenzene (F004) (see attached Waste Stream Permit No. 000116);
3. Alcohols including ethanol, ethylene glycol, butanol (U031), isobutyl alcohol (U140) isoamyl alcohol, tert-amyl alcohol, cyclohexanol, diacetone alcohol, 2 ethyl-1-butanol, 2-ethyl-1-hexanol, ethyl butanol, isopropyl alcohol 1,3 butylene glycol, 2-methyl-2-butanol, propanol, 2-methyl-1-propanol, propylene glycol, n-octanol and methanol (U154) (see Waste Stream Permit No. 000113 and 000115);





4. Ketones including acetone (F003, U002), MEK (F003, U159) cyclohexane, isophorene, acetophenone, diacetone alcohols, diisobutyl ketones and MIBK (F003, U161) (see attached Waste Stream Permit No. 000114);
5. Halogenated aliphatics (F001, F002) including tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene chloroform (U044), perchloroethylene, dichlorobenzene, 1,1,2-trichloroethane (U227) and trichlorofluoromethane (see attached Generic Waste Stream Permit No. 000118);
6. Esters including ethyl acetate (F003), vinyl acetate (D001), dioctyl phthalate (U107) methyl acetate, isobutyl acetate, isopropylacetate, isoamyl acetate, amyl acetate, ethyl methacrylate (U118), dimethyl phthalate (U102), di-n-butyl phthalate (U069), ethyl acrylate (U113) and diethyl phthalate (U088). (See Waste Stream Permit 000172).
7. Corrosive waste (D002). (See attached Waste Stream Permit NO. 000119).
8. Non-hazardous used, waste, off-spec and surplus oils. (See attached Waste Stream Permit 000110).
9. Hazardous used, waste, off-spec and surplus oils (K048, K049, K050, K051, K052, D005, D006, D007, D008, D009, D010, D011). (See attached Waste Stream Permit 000111).

The oils\* permitted for acceptance under Generic Permits 0001110 and 000111 are limited to the following:

engine lube oils  
 transmission fluids  
 hydraulic oils  
 insulating fluids and coolant oils  
 turbine oils  
 gear oils  
 greases  
 distillate and residual fuel oils  
 tallows  
 vegetable oils  
 paraffins

asphalts  
 sulfonate oils  
 oil/water separator wastes  
 bilodge oil wastes  
 Petroleum refining intermediates:  
 (cycle, decant and slop oils)  
 metal working fluids:  
 (cutting, grinding, machining,  
 rolling, stamping and quenching)  
 mineral oils





listed hazardous petroleum refinery wastes:

1. DAF float -- K048
2. slop oil emulsion solids -- K049
3. heat exchange bundle cleaning sludge -- K050
4. API separator sludge -- K051
5. tank bottoms (leaded -- K052)

\* - This includes still bottoms, tank bottoms, barge bottoms, washwaters and spill clean-up residues.

B. For Blending into Supplemental Fuels

1. Non-hazardous used, waste, off-spec and surplus oils. (See attached Waste Stream Permit 000105).
2. Hazardous used, waste, off-spec and surplus oils (K048 thru K052, D005, D006, D007, D008, D009, D010, D011). (See attached Waste Stream Permit 000106).

The oils\* permitted for acceptance under Generic Permits 000105 and 000106 are limited to the following:

engine lube oils  
transmission fluids  
hydraulic oils  
insulating fluids and coolant  
oils  
turbine oils  
gear oils  
greases  
distillate and residual fuel oils  
tallows  
vegetable oils  
paraffins  
mineral oils

asphalts  
sulfonate oils  
oil/water separator wastes

bilidge oil wastes

Petroleum refining intermediates:  
(cycle, decant and slop oils)

metal working fluids:

(cutting, grinding, machining,  
rolling, stamping and quenching)

Listed hazardous petroleum refinery  
wastes:

- 1) DAF float -- K048
- 2) slop oil emulsion solids -- K049
- 3) heat exchange bundle cleaning  
sludge -- K050
- 4) API separator sludge -- K051
- 5) tank bottoms (leaded) -- K052





Page 4

3. Non-halogenated solvents and liquids \*\* including the following: (see attached Waste Stream Permits 000107 and 000108).

mineral spirits	napthas	paraffin solvents
plasticizers	styrene	jet fuel
gasoline	heptane	hexane
cresols	nitrobenzene	cresylic acid
vinyl acetate	ethyl acetate	diethyl phthalate
cyclohexane	dioctyl phthalate	benzene
cumene	xylene	ethylene glycol
toluene	ethanol	methanol
butanol	isobutyl alcohol	MIBK
acetone	MEK	Kerosene
lacquer thinner	paint thinner	stoddard's solvent
turpentine	isoprene	pentane
hexene	isooctane	isopentane
methylcyclohexane	ethylbenzene	isoamyl alcohol
tert-amyl alcohol	cyclohexanol	diacetone alcohol
2 ethyl-1-butanol	2 ethyl-1-hexanol	ethyl butanol
isopropyl alcohol	2 methyl 2-butanol	propanol
2 methyl 1-propanol	N-octanol	cyclohexane
isophorene	acetophenone	diisobutyl ketones
methyl acetate	isobutyl acetate	isopropylacetate
isoamyl acetate	amyl acetate	ethyl methacrylate
		ethyl acrylate

Washes and sludges from the formulation of ink (K086)

4. Halogenated solvents and liquids \*\* including the following: (see attached Waste Stream Permit 00109.)

tetrachloroethylene	trichloroethylene
1,1,1 trichloroethane	methylene chloride
carbon tetrachloride	chlorobenzene
1,12-trichloro-1,2,2 trifluoroethane	orthodichlorobenze
trichlorofluoromethane	dichlorobenzene

\*\* -- This includes still bottoms, tank bottoms, washwaters and spill clean-up residues.

C. Bulking/blending for off-site incineration

1. Non-halogenated solvents and liquids reference in Item A1 through A4 and A6 above. (See attached Waste Stream Permit 090011.)
2. Halogenated solvents and liquids reference in Item A-5 above. (See Waste Stream Permit 090010.)





Page 5

D. For Treatment

1. Corrosive waste for neutralization (D002) including sulfuric acid, phosphoric acid, sodium hydroxide and potassium hydroxide. (See attached Waste Stream Permit 000120.)
2. Off-specification or scrap commercial products (D001) for shredding which shall be limited to the following:
  - a. Soaps and Detergents
  - b. Household Cleaners
  - c. Health and Beauty Aids
  - d. Food Products
  - e. Paints and related Products
  - f. Air Fresheners
  - g. Shop Products (lube & penetrating oils, other petroleum base products)
  - h. Construction Products (adhesives, cements, sealants)

(See attached Waste Stream Permit 000173).

3. Non-hazardous off-specification or scrap commercial products for shredding which shall be limited to the following:

- a. Soaps and Detergents
- b. Household Cleaners
- c. Health and Beauty Aids
- d. Food Products
- e. Paints and related Products (thinners and removers)
- f. Pallets
- g. Automotive equipment
- h. Air Fresheners
- i. Shop Products (lube & penetrating oils, other petroleum base products)
- j. Construction Products (adhesives, cements, sealants)
- k. Electronic Equipment and Components
- l. Small household appliances
- m. Construction building materials and hardware
- n. Toys
- o. Confidential documents and records
- p. Other manufacturer and retail appliances and components

(See attached Waste Stream Permit 000174).

E. For Crushing

"RCRA Empty" containers (see attached Waste Stream Permit 000208).

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified on the records of the Environmental Protection Agency, Division of Land Pollution Control by the permit number(s) and log number(s) designated in the heading above.





The permit is issued subject to the standard conditions attached hereto and incorporated herein by reference, and further subject to the following special conditions:

1. An analysis of each waste stream accepted from each generator shall be maintained on file at this site for review by this Agency.
2. Special wastes received at this facility for storage, treatment and/or recovery shall be transported to the site under a properly completed manifest.
3. The specifications for each supplemental fuel blended on-site, including off-specification used oil fuels and hazardous waste fuels, shall be submitted to the Agency within thirty (30) days after the effective date of this permit. Should the type(s) of fuel blended on-site deviate from the initial submissions, Petrochem shall submit a report to the Agency, identifying the specifications for each supplemental fuel blended, prior to shipment off-site.
4. Oils contaminated with PCB's (greater than 50 ppm) or Dioxins are not permitted under this generic permit.
5. The name and address of any new marketer and/or burner of these blended fuels (includes specification oils, off-specification oils and hazardous waste fuels), along with documentation of certifications that each marketer and/or burner of hazardous waste fuels or off-specification used oil fuels has so notified USEP and has received a Federal I.D. number, shall be submitted to the Agency prior to shipment off-site to that facility.
6. All waste stored at this site for further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental permit system and manifest system.
7. Special wastes generated at the site for disposal, incineration or further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental permit system and manifest system.
8. This facility shall report to the Agency, on quarterly basis, the total quantity from each generator of each of the generic wastes shown in the attachment to this permit that was received for processing. (See New Attached Report Form). In addition, Petrochem shall submit an inventory log for all materials and waste shipped off-site (see enclosed Inventory Report). This information shall be submitted along with the Quarterly Generic Report. The above reports should be sent to:

Compliance Monitoring Section  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Rd  
Post Office Box 10076 63





Illinois Environmental Protection Agency

2200 Churchill Road, Springfield, IL 62706

Page 7

This schedule for submission of these waste receipt reports shall be within 30 days of the end of each quarter (i.e., reports due by 30th day of January, April, July and October).

Except as modified above, this site shall be operated in accordance with the terms and conditions of Permit No. 1983-5-OP.

Very truly yours,

Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:MS:mab/0207j/sp

Attachments

cc: Northern Region  
Division File  
Compliance Monitoring  
DAPC -- Jim Cobb  
Jeanette Virgilio, RUI, Inc.



SUMMARY

0311620007  
09/30/88

Petrochem Services, Inc. is a service contracting company specializing in oil and chemical industry cleaning, maintenance and emergency spill response. This facility receives hazardous and non-hazardous wastes from off site and blends and treats these wastes to produce hazardous waste fuel, off-specification used oil and on-specification used oil. (Little to no on-spec used oil is generated.) Sources of waste generated off site include cleaning tanker trucks and cleaning off site stationary tanks. This facility also operates an on site barge cleaning operation. They receive hazardous and non-hazardous wastes from IEPA (ERU)/DCI activities (spills, abandoned drums, etc.), Tox-Away (a government-sponsored Indianapolis, IN. project to handle the shipment and disposal of hazardous household wastes) and generators, for temporary storage, which are eventually going off site for incineration.

**HAZARDOUS WASTES GENERATED (RESTRICTED)**Hazardous Waste Fuel - D001, F003, F005

- Generated by blending and treating hazardous and non-hazardous waste
- Rate of generation: 45,000 gallons per month
- Shipped off site approximately 3 times per week to Continental Cement (Hanibal, MO.) or Systech (Greencastle, IN.) for use as fuel in cement kilns
- Stored in tanks

**APPARENT DEFICIENCY NOTED:**

Containers of restricted hazardous waste are not marked to identify the date they entered storage.

NOV 15 1988



are completed and begin implementing said amendments no later than six months after such changes occur.

Petrochem will review its SPCC at least once every three years and will amend its SPCC Plan to reflect improvements in recognized spill prevention and control technologies which will be implemented to significantly reduce the likelihood of a spill or release.

All amendments to the SPCC plan will be reviewed and certified by an independent Registered Professional Engineer.

Subpart 112.7-Guidelines for the preparation and implementation of a Spill Prevention Control and Countermeasure Plan.

Petrochem Services, Inc. has designed, constructed, maintains and operates its facility in a manner to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of oil, hazardous materials or waste, or the constituents of such materials or waste to the air, soil or surface water which could threaten human health or the environment. See Attachment B, for a list of materials which may be handled at Petrochem's facility.

(a). Petrochem's Lemont facility has only had one reportable incident at its facility since its inception in 1983. That incident was the loss of approximately 100 pounds of liquid caustic to the canal in 1985, due to a hose failure near the coupler fitting. The spill was immediately contained and cleaned-up by Petrochem and properly reported to the National Response Center and Illinois Environmental Protection Agency. No significant damage to the environment or risk to human health occurred as a result of this spill. Petrochem now over specifies its hoses and couplings for wayside work. All unused couplings are capped.

(b). Petrochem's tank farm storage area and drum storage area are entirely surrounded by concrete retaining walls to create areas equivalent to 110% of the total rated capacity of the storage vessels. This prevents loss of materials to the canal or soil. The greatest potential for loss of materials lies at the transfer points of materials from vehicles or vessels into the tank farm.

The unloading dock for the drum storage area is designed such that drums once placed on the dock will drain into the storage area within the retaining walls. Should they begin to leak inside of a delivery truck, or spill or rupture before crossing the threshold of the dock, spilled material would be contained in a 200 gallon spill containment/collection sump built into the asphalt drive at the base of the dock.



Lemont/Cook  
P.O. Box 337  
Petroleum

caustic spill / <sup>000</sup> Barge Hose / 28% caustic / 150 gal / E

2/19/85

Classification of incident Minor



(iii/iv) Transfer areas for the tank trucks or for drums are simple retention basins for spills and precipitation. Drainage is accomplished by manually activated pumps as noted above.

Drainage for the balance of the property (outside of the spill retention or storage containment areas) is to the canal either by direct gradient or by a small ditch on the western portion of the property. (See Attachment E, Facility Drainage Map.) The areas which drain directly to the canal are, for the most part, driveways and parking areas for employee vehicles. The drainage ditch on the western portion of the property has a control gate which can be closed to contain and recover materials in the event materials should appear in or on the surface of the waters. The capacity of the ditch is several thousand gallons.

Because of Petrochem's location below the dike road adjacent to the DesPlaines River, it is subject to frequent seepage along the parking areas of the north side of the property when the river is high. Drainage tiles have been buried to divert this flow around the buildings and towards the barge slip. This water is regarded as having little chance of being contaminated.

(e) (2) Bulk storage tanks (on shore).

(i/ii) All of the storage tanks and vessels used inside the facility are constructed of materials compatible with the material held in storage, and are not used to store other materials. Each vessel, except the receiving tanks, is dedicated to a particular type of material. All vessels are located inside of a concrete dike designed to contain 110% of the total capacity of all vessels. (See Attachment F, Storage Tank Descriptions).

(iii) Rainwater which collects inside of the diked area is used as process water in the closed loop barge cleaning system and/or sent to a treatment facility to be cleaned prior to discharge.

(iv/v) Petrochem does not have any wholly or partially buried tanks for any storage purpose (except the septic system) on its facility.

(vi) Petrochem's tank farm vessels are subjected to periodic integrity testing on the schedule as noted in Attachment G of this plan. Employees are instructed to be observant for signs or evidence of deterioration, leaks, or accumulation of stored materials inside the diked areas as part of their normal, daily work routine. They are to report any problems which they find to their supervisor immediately.

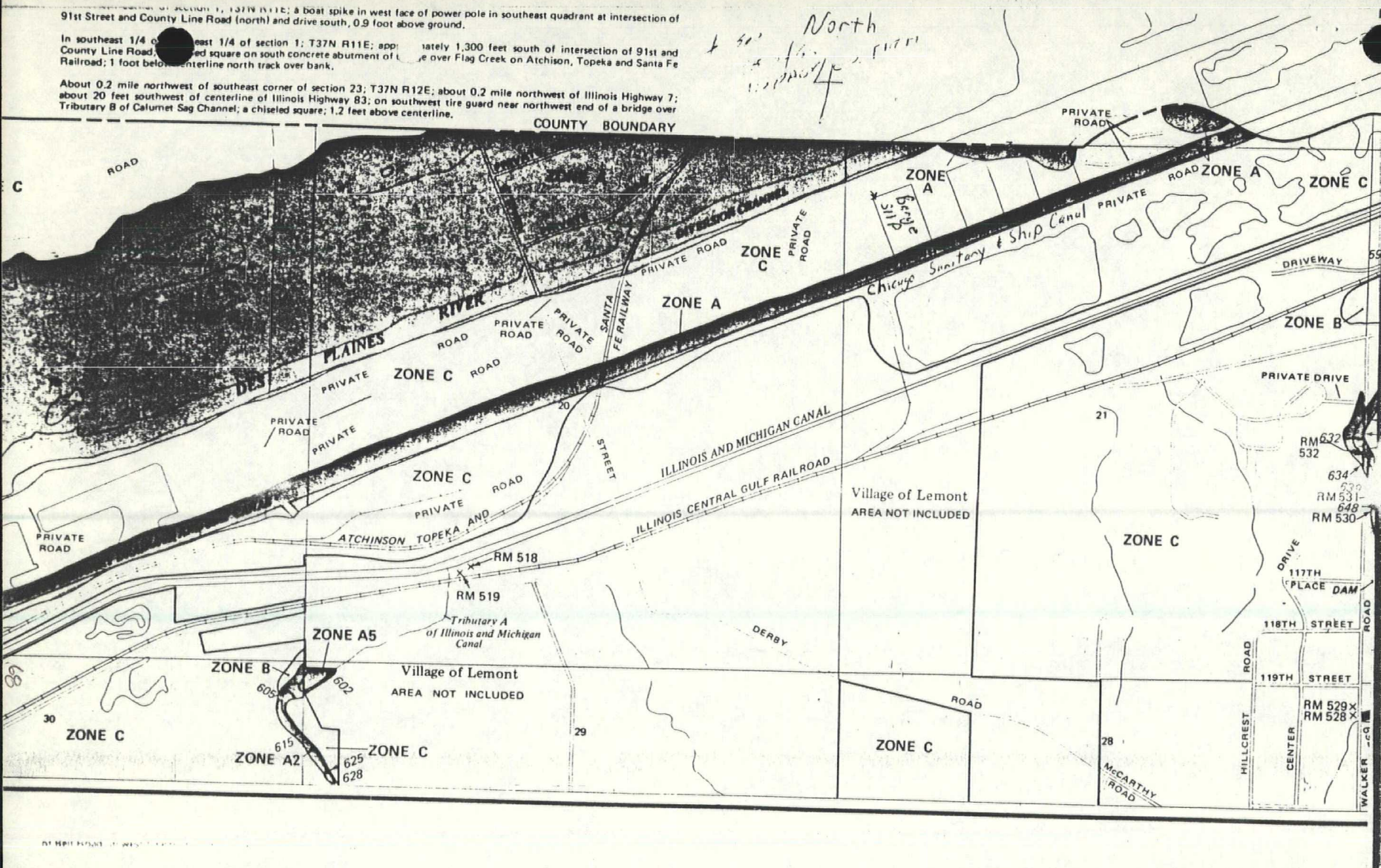


91st Street and County Line Road (north) and drive south, 0.9 foot above ground.

In southeast 1/4 of section 1, T37N R11E; approximately 1,300 feet south of intersection of 91st and County Line Road; a square on south concrete abutment of bridge over Flag Creek on Atchison, Topeka and Santa Fe Railroad; 1 foot below centerline north track over bank.

About 0.2 mile northwest of southeast corner of section 23; T37N R12E; about 0.2 mile northwest of Illinois Highway 7; about 20 feet southwest of centerline of Illinois Highway 83; on southwest tire guard near northwest end of a bridge over Tributary B of Calumet Sag Channel; a chiseled square; 1.2 feet above centerline.

COUNTY BOUNDARY



Document 005



Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program at (800) 638-6620 or (800) 424-8872.

*Call this # to receive entire map.*



APPROXIMATE SCALE

1000 0 1000 FEET

# NATIONAL FLOOD INSURANCE PROGRAM

## FIRM FLOOD INSURANCE RATE MAP

COOK COUNTY,  
ILLINOIS  
(UNINCORPORATED AREAS)

PANEL 165 OF 245  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
170054 0165 B

EFFECTIVE DATE:  
APRIL 15, 1981



federal emergency management agency  
federal insurance administration

100-Year Flood Boundary \_\_\_\_\_  
Zone Designations\* With Date of Identification  
e.g., 12/2/74 \_\_\_\_\_  
100-Year Flood Boundary \_\_\_\_\_  
500-Year Flood Boundary \_\_\_\_\_  
Base Flood Elevation Line With Elevation in Feet\*\* \_\_\_\_\_ 513 \_\_\_\_\_  
Base Flood Elevation in Feet Where Uniform Within Zone\*\* (EL 967)  
Elevation Reference Mark RM7 x  
River Mile M1.5  
\*\*Referenced to the National Geodetic Vertical Datum of 1929



### \*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

### NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:  
MAY 27, 1977

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:  
APRIL 15, 1981

FLOOD INSURANCE RATE MAP REVISIONS:



Appendix A



Petrochem Services, Inc  
Lemont, IL



SITE LOCATION



Appendix B







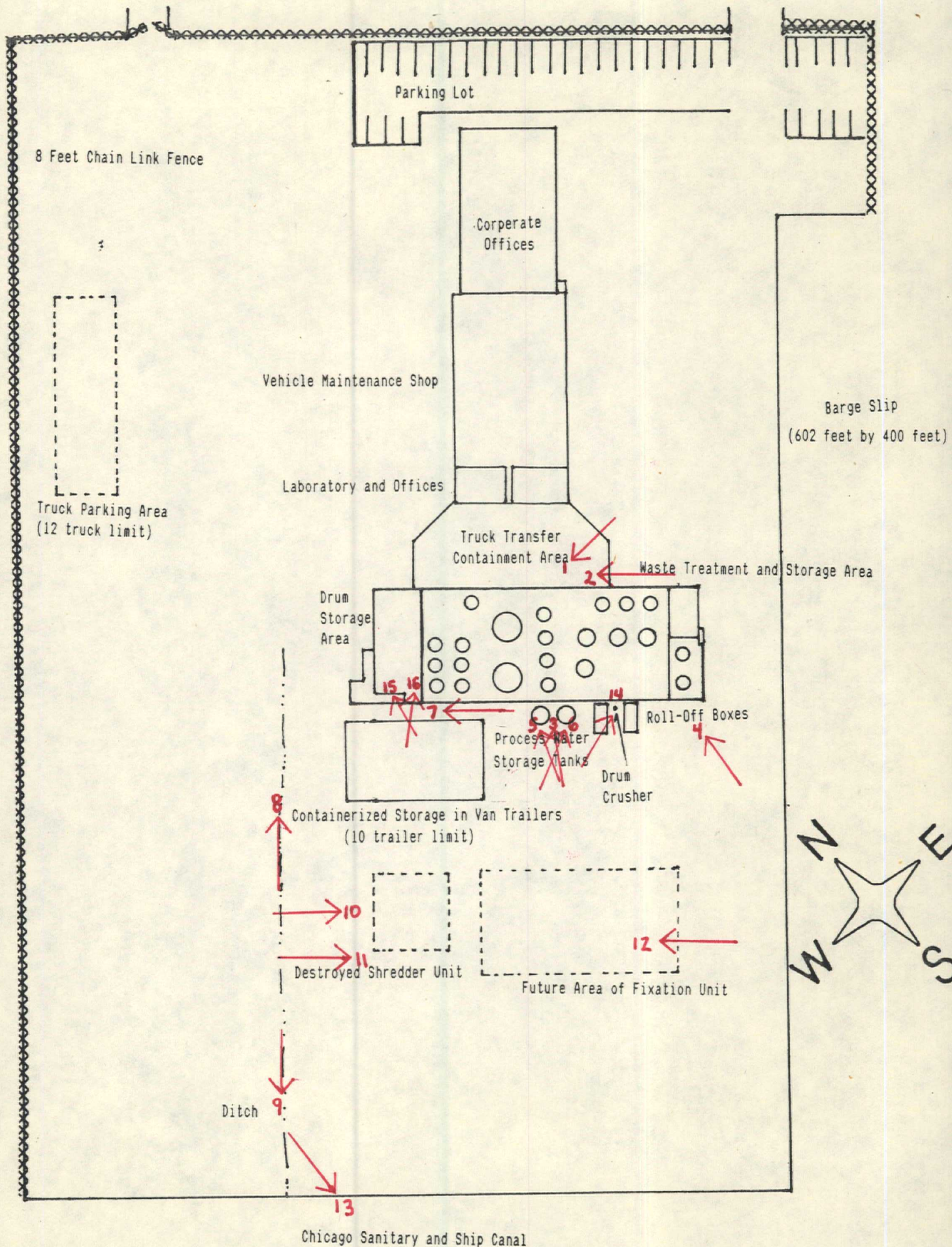
Appendix C



PHOTOGRAPHS



Canal Bank Road N. E.



Photograph locations



DATE: 9 Jan 89

ME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services, Inc

Canal Bank Rd. N.E., Lemont

Comments: Picture taken toward

the west of waste process

storage and treatment area

Roh Watson of IEPA on left

Mike Crafton of Heritage  
Environmental Services on  
right



1

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. NE

Lemont, Cook Co. IL

Comments: Picture taken toward

the northwest of truck

transfer containment area



2



DATE: 9 Jan 89

ME: 1:00 pm

Photograph by:

Tim Murphy

Location:

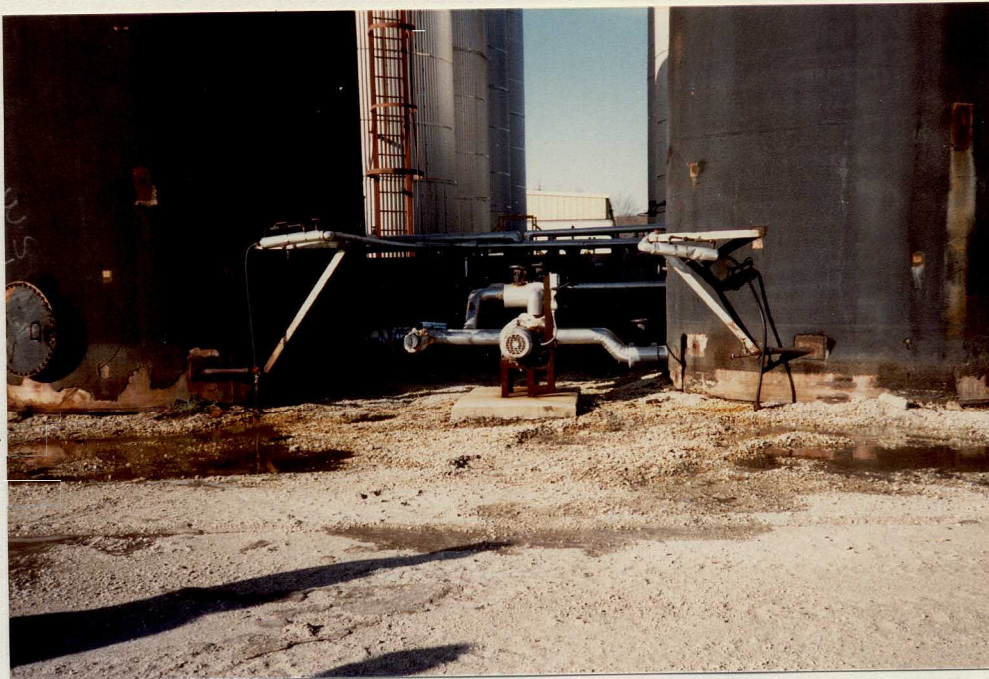
Petrochem Services, Inc

Canal Bank Rd NE, Lemont

Comments: Picture taken toward

the northeast of process

water storage tanks



3

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. NE

Lemont, Cook Co., IL

Comments: Picture taken toward

the north of waste process

storage and treatment area,

roll-off boxes and top of

drum crusher can also be

seen



4



DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services, Inc.

Canal Bank Rd. N.E., Lemont

Comments: Picture taken toward  
the North Northeast with a  
process water storage tank in  
foreground and waste  
process storage and treatment  
area in background

5



DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. N.E.

Lemont, Cook Co., IL

Comments: Picture taken toward  
the east Northeast with a  
process water storage tank in  
foreground and waste process  
storage and treatment area  
in background

6





DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc.

Canal Bank Rd. N.E. Lemont

Comments: Picture taken toward  
the northwest along diked  
wall of waste process storage  
and treatment area, trailer  
storage area on left



7

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd N.E.

Lemont, Cook Co., IL

Comments: Picture taken toward  
the northeast of drainage  
ditch, trailer storage  
area on the right



8



DATE: 9 Jan 89

ME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc  
Canal Bank Rd N.E., Lemont

Comments: Picture taken toward  
the south west of drainage  
ditch going toward sanitary  
and ship canal



9

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd N.E.  
Lemont, Cook Co., IL

Comments: Picture taken toward  
the south southeast of  
burned shedder unit



10



DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc  
Canal Bank Rd. N.E., Lemont

Comments: Picture taken toward  
the southeast of South-  
west part of facility, part of  
burned shedder unit on  
left



11

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. N.E.  
Lemont, Cook Co., IL

Comments: Picture taken toward  
the north west of South  
west part of facility  
where fixation unit is  
to be built, burned  
Shedder unit in back-  
ground



12



DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc.

Canal Bank Rd. N.E., Lemont

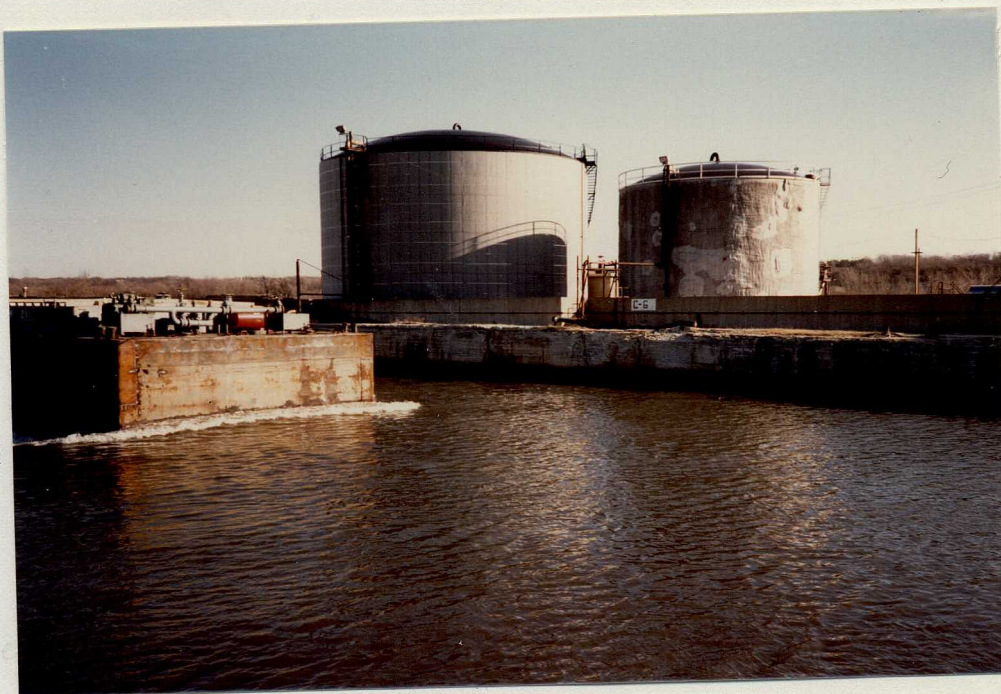
Comments: Picture taken toward

the south southwest across

sanitary and ship canal

showing fractures in limestone

Niagaran dolomite



13

DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. N.E.

Lemont, Cook Co., IL

Comments: Picture taken toward

the east northeast of

drum crushing unit, 15

cubic yard roll-off box

to the right



14



DATE: 9 Jan 89

TIME: 1:00 pm

Photograph by:

Tim Murphy

Location:

Petrochem Services Inc

Canal Bank Rd. N.E., Lemont

Comments: Picture taken toward

the north northeast of  
the drum storage area



15

DATE: 9 Jan 89

TIME: 1:00pm

Photograph by:

Tim Murphy

Location: Canal Bank Rd. N.E.

Lemont, Cook Co., IL

Comments: Picture taken toward

the Northeast of the drum  
storage area



16